

IN THE CLAIMS:

1. (Currently amended) A process for preparing bleached mechanical pulp having high brightness from wood chips comprising the steps of impregnating wood chips having low bleachability with a chemical liquor comprising a chelating agent at a pH range of 7-12 and then removing the impregnated impregnating chemical liquor from the chips, followed by a sequential step of (a) defibration by primary refining, bleaching, and beating by secondary refining, or (b) defibration by primary refining, beating by secondary refining and bleaching, wherein the step of impregnating comprises compressing the chips, immersing the chips under compression or after compression in the chemical liquor and releasing pressure to impregnate them with the chemical liquor, and wherein the step of removing the impregnated chemical liquor comprises compressing the chips impregnated with the chemical liquor to drain the impregnating chemical liquor from the chips.

2. (Currently amended) The process for preparing mechanical pulp according to claim 1 characterized in that the impregnating chemical liquor is an aqueous solution of an alkaline inorganic compound and/or a and said chelating agent.

3. (Currently amended) The process for preparing mechanical pulp according to claim 1 characterized in that the chemical impregnation step comprises compressing the chips at a compression ratio of 4:1-16:1 and releasing pressure to impregnate them with the chemical liquor and the step of removing the impregnated impregnating chemical liquor comprises compressing the chips impregnated with the chemical liquor at a compression ratio of 4:1-16:1 to drain the impregnated impregnating chemical liquor.

4. (Currently amended) The process for preparing mechanical pulp according to claim 2 characterized in that the chemical impregnation step comprises compressing the chips

at a compression ratio of 4:1-16:1 and releasing pressure to impregnate them with the chemical liquor and the step of removing the impregnated impregnating chemical liquor comprises compressing the chips impregnated with the chemical liquor at a compression ratio of 4:1-16:1 to drain the impregnated impregnating chemical liquor.

5. (Currently amended) The process for preparing mechanical pulp according to claim 1 characterized in that the wood chips are single chips or mixed chips of two or more [[of]] wood species having low bleachability selected from Larix, Pseudotsuga, Cryptomeria, Tsuga, Thuja and Pinus.

6. (Currently amended) The process for preparing mechanical pulp according to claim 2 characterized in that the wood chips are single chips or mixed chips of two or more [[of]] wood species having low bleachability selected from Larix, Pseudotsuga, Cryptomeria, Tsuga, Thuja and Pinus.

7. (Currently amended) The process for preparing mechanical pulp according to claim 3 characterized in that the wood chips are single chips or mixed chips of two or more [[of]] wood species having low bleachability selected from Larix, Pseudotsuga, Cryptomeria, Tsuga, Thuja and Pinus.

8. (Currently amended) A process for preparing bleached mechanical pulp having high brightness comprising the steps of (a) defibrating wood chips by primary refining, (b) washing pulp fibers formed by defibration such that defibrated pulp is diluted with water at a temperature of 5-95 °C to a concentration of 0.5-5.0 %, and is dehydrated by a press on a filter and such that the washing efficiency is 52.6-99.2 %, (c) bleaching the pulp fibers, and (d) further beating them by secondary refining to give bleached mechanical pulp having a Hunter brightness of 45-65 %.

9. (Currently amended) The process for preparing mechanical pulp having high brightness according to claim 8 characterized in that the wood chips are single chips or mixed chips of two or more [[of]] hard bleaching wood species selected from Larix, Pseudotsuga, Cryptomeria, Tsuga, Thuja and Pinus.

10. (Currently amended) The process for preparing mechanical pulp having high brightness according to claim 8 characterized in that the step of washing defibrated pulp comprises dilution with water at a temperature of 5-95°C and dehydration by a press on a filter and the washing efficiency is ~~52.6-99.2%~~ 52.6-94.7%.

Claim 11 (Cancelled)

12. (Original) The process for preparing mechanical pulp having high brightness according to claim 8 characterized in that the step of bleaching defibrated pulp after washing comprises single-stage bleaching with an oxidizing agent or a reducing agent.

13. (Original) The process for preparing mechanical pulp having high brightness according to claim 9 characterized in that the step of bleaching defibrated pulp after washing comprises single-stage bleaching with an oxidizing agent or a reducing agent.

14. (Original) The process for preparing mechanical pulp having high brightness according to claim 10 characterized in that the step of bleaching defibrated pulp after washing comprises single-stage bleaching with an oxidizing agent or a reducing agent.